REMARKS

This amendment is submitted under the provisions of 37 CFR 1.116.

The specification has been amended in order to provide the customary heading, Description of the Preferred Embodiments, to improve the idiom, to provide antecedent support for the above amendment of claim 1, and to correct a minor informality noted at page 3, line 15 thereof.

Claim 12 was amended in order to correct a typographical error therein. Claims 1, 5, 7, 9, 10 and 15 were amended in order to better define the invention. The material added to claim 1 is implicit in the application since a correction factor which corrects a basic setting must result in an operation (e.g. adjustment) based on the "combined effect of both" the basic setting and the correction factor, as is now claimed in claim 1. A similar rationale applies to the above amendment of claim 7.

Claim 5 was amended in order to more clearly cover the original intended meaning of this claim, i.e. that the stored correction factor is based upon an individual property of the particular display device which is coupled to the driver circuit to make up the claimed display module. Claim 5 was further amended to provide better antecedent correlation of the terminology used therein, i.e. "driver circuit", as in parent claim 1, rather than --display driver--, as was used in claim 5 prior to the above amendment.

Claim 9 also was amended in order to more clearly encompass its original intended meaning, i.e. as argued in the last amendment, that the drive signal is based upon the stored basic setting and the stored correction factor, rather than the either/or situation in the Yamamoto patent. The above amendment to claim 10 is made for similar reasons, since the term "both" apparently is interpreted by the Patent and Trademark Office to cover the Yamamoto either/or situation, whereas applicants always intended it to mean the and function.

Claim 15 was amended in order to clarify its meaning slightly.

Claims 14 and 15 were rejected under 35 USC 112, first paragraph, as not conveying that the inventors had possession of the claimed invention. Although ambient temperature is a factor in the values of the adjustable characteristic of the driver circuit, it is not a factor in the calibration procedure for arriving at the stored basic setting or the stored correction factor, and so these stored values are not temperature dependent parameters, as recited in claim 14 and these stored values are each independent of the ambient temperature of the display module of which they are each a part, as set out in claim 15. Corrections for ambient temperature, if required, are not a part of the stored calibration values of the driver circuit 10 or the adjustment method of claim 6. Temperature correction, if necessary, is made when the driver circuit is put into operation by the user of such apparatus. The stored basic

setting and stored correction factor are made by the manufacturer in a calibration procedure prior to sale of the novel device. The specification explains this distinction and claims 14 and 15 merely claim same. The Yamamoto patent is designed to correct for temperature variations during operation of his device by the user of same, not to a calibration of the device by the manufacturer which is applicable to various temperature environments.

Reconsideration and withdrawal of the rejection under 35 USC 112, first paragraph, is respectfully requested.

Claims 1-3, 5-13, 15 and 17 were rejected under 35 USC 102(b) as being anticipated by Yamamoto (USP 5,515,074).

As explained in the amendment filed 3/18/03, in the Yamamoto apparatus, display density of an LCD display screen is controlled "according to one of the updated density data stored in the main memory and the density data stored in the data memory corresponding to the environmental temperature detected by the temperature sensor" (see column 2, lines 21-25 of Yamamoto; also see the last paragraph of claim 2 in column 6). In Yamamoto, the display density is controlled either by the data in main memory (14), or the data stored in data memory (13), but not by the combined effect thereof, as is now clearly recited in amended claim 1. This amendment does not really present a new issue as this was the original intent of claim 1, as can be seen from the statement at pages 10-11 of the amendment filed 3/18/03, i.e. "In contrast, claim 1 calls for a

driver circuit operative to adjust the adjustable characteristic based on the base setting and the correction factor. That is, in Yamamoto the control is an either/or factor, whereas in claim 1 the control is based on both the stored basic setting and the stored correction factor."

The "102" rejection of claim 1 relies upon Figs. 1 and 2 of Yamamoto, items ST6, ST6A and ST7 of Fig. 2, and column 4, line 61 - column 5, line 5. This material does not factually support the Patent and Trademark Office argument, as can be seen from the separate parallel paths at ST5 versus ST5A, ST5B in Fig. 2 of Yamamoto. The Yamamoto device operates either on the main memory (14) data or the data memory (13)data according to the result of the data test in step ST4 of Fig. 2.

Clearly, the final rejection does not set forth the factual support requisite to a prima facie case of anticipation as to amended claim 1.

As to claim 2, column 3, lines 1-42 of Yamamoto does not satisfy the meaning of the word "accessible" as used in this claim and as described in applicant's specification.

According to dependent claim 5 (as amended), the stored correction factor is based on an individual property of the particular display device present in the display module. In column 3, lines 24-30 of Yamamoto, relied upon by the Patent and Trademark Office, the automatic temperature follow-up controller (18) is not

controlled or based upon an individual property of the particular display device (1), but rather on the environmental temperature, which is not the same thing as the claimed individual property of the particular display device (1) of the overall display module, 10, 1 of Yamamoto.

The final rejection does not present the factual evidence required for a prima facie case of anticipation as to claim 5.

Claim 6 is not anticipated by Yamamoto because, inter alia, this reference does not disclose the novel claimed feature of determining a correction factor to the basic setting based on the actual characteristic of the display device and the characteristics of the driver circuit when the basic setting is used. The final rejection relies in part on column 3, lines 1-7 of Yamamoto. This material relates only to the main memory (14) and therefore does not provide support for rejecting the last paragraph of claim 6.

The only other factual support presented in the Office Action for the "102" rejection of the aforesaid feature of claim 6 is column 4, lines 61-68 and column 5, lines 1-5 of Yamamoto. But the subject matter in Yamamoto cited by the Patent and Trademark Office to provide factual support for this feature of claim 6 deals instead with manual control of the apparatus, temperature follow-up control, and further operations if power is off. All of this is irrelevant to the aforesaid novel feature of claim 6.

Furthermore, the data stored in data memory (13) of Yamamoto

is not a correction factor for the data stored in main memory (14), but is temperature dependent data to be substituted for, i.e. used instead of, the data in main memory (14). Thus, Yamamoto does not determine a correction factor to the data (basic setting - ?) in main memory (14), as is required by claim 6, but determines other data that is temperature dependent and can be substituted for the main memory data under certain specified circumstances.

In view of the above, the final rejection does not set forth a prima facie case of anticipation as to claim 6 in view of the absence of any factual support therefor in the final rejection.

Amended claim 7 clearly recites the novel step of adjusting the driver circuit based upon the combination of both the stored basic setting and the stored correction factor, which, as discussed above, is not taught in Yamamoto.

Method claim 8 calls for the further step of determining the ambient temperature etc. so that the driver circuit is adjusted according to three parameters, including ambient temperature. In Yamamoto, the driver circuit is responsive only to temperature, wherefore it does not anticipate claim 8, as dependent on claims 7 and 6.

Claim 9 was amended so that it more clearly recites that the adjustable characteristic is simultaneously based upon the stored basic setting, the stored correction factor and the temperature correction factor, whereas Yamamoto is controlled by temperature

only and not by the three claimed parameters of claim 9. The factual material cited in Yamamoto to support the "102" rejection of claim 9 does not anticipate this claim, and so the final rejection does not set out a prima facie case of anticipation therefor.

As to claim 10, the data stored in data memory (13) of Yamamoto does not correct the data in main memory (14), and the generated drive signal is not determined by a stored basic setting (data in main memory 14) as modified by a stored correction factor (data in data memory 13).

Yamamoto does not derive a correction factor by a calibration operation based upon measurement of the optical quality of a display device, and so claim 11 is not anticipated by the Yamamoto apparatus. The factual evidence cited by the Patent and Trademark Office to support the "102" rejection of this claim, i.e. items ST3-ST5, ST9 in Fig. 2 and column 3, line 57-column 4, line 5 is inadequate, wherefore a prima facie case of anticipation is not present in the Office Action.

As to claim 12, the factual material cited by the Patent and Trademark Office is silent as to the claimed spread in the manufacturing process and the typical temperature dependence of a typical display device. The final rejection therefore does not make out a prima facie case of anticipation as to claim 12.

A similar argument applies to the "102" rejection of claim 13, since the factual support material in Yamamoto cited by the Patent

and Trademark Office is silent with respect to the novel features of this claim. For example, claim 13 specifically recites that the claimed apparatus is without adjustment of the contrast etc. Fig. 1 of Yamamoto clearly shows a manual control circuit (17).

The data stored in data memory (13) of Yamamoto is not a stored corrected factor derived by a calibration procedure based upon measuring the optical quality of the display module, as recited in claim 16. The Yamamoto data is real time temperature dependent information and is not part of a calibration procedure, as specified in claim 16. Claim 16 is novel and patentable over Yamamoto.

As to claim 17, the output signal of the digital/analog converter (12) of Yamamoto is not based upon both the stored basic setting and the stored correction factor, but is based on either the data in main memory (14) or the data in data memory (13). Claim 17 is not anticipated by the Yamamoto apparatus.

Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Yamamoto in view of Inoue (USP 5,517,212).

In the Yamamoto apparatus, display density of an LCD display screen is controlled "according to one of the updated density data stored in the main memory and the density data stored in the data memory corresponding to the environmental temperature detected by the temperature sensor" (see column 2, lines 21-25 of Yamamoto; also see last paragraph of claim 2 in column 6).

At best, one might argue that the variable resistor (17) of

Inoue could be a part of the manual control circuit (17) of Yamamoto, but even so, this would not affect any adjustable characteristic of the Yamamoto data memory (13), i.e. the alleged stored correction factor.

It would not be obvious to combine Inoue with Yamamoto in a manner that would result in the novel driver circuit as claimed in claim 4 of this application. The Office Action does not present the factual support requisite for valid prima facie case of obviousness as to claim 4.

Entry of this amendment is respectfully requested because it will place the application in condition for allowance or alternatively in better form for appeal by more clearly defining the novel subject matter in the rejected claims. Entry of the amendment is proper because the amendments to the claims merely add material that was implicit therein already, and so such amendments do not materially alter the scope thereof and therefore will require no further consideration and/or search by the Patent and Trademark Office. The amendments were not made earlier because the prior Office Action of 12/30/02 was incomplete and indefinite and was only somewhat clarified in the final rejection.

Reexamination and allowance of the application are respectfully requested.

Respectfully submitted,

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